

WHAT IS CLAIMED IS:

1. A digital signal receiving tuner receiving digital signals of a plurality of frequency bands, comprising:

an input circuit receiving said signals of a plurality of frequency bands;

an input selector circuit receiving the signals from said input circuit to divide the received signals into a plurality of groups according to the frequency bands and selecting and outputting the received signals;

a radio-frequency amplification input filter circuit supplied with a band-switching voltage for extracting a received signal of a corresponding frequency band from the received signals supplied from said input circuit;

a radio-frequency amplifier circuit for amplifying the received signal supplied from said radio-frequency amplification input filter circuit;

a radio-frequency amplification output filter circuit supplied with the band-switching voltage for selectively outputting a radio-frequency signal of a predetermined band among radio-frequency signals supplied from said radio-frequency amplifier circuit;

an oscillator circuit having a phase-locked loop for supplying said band-switching voltage and outputting a local oscillation signal for each frequency band; and

a mixer circuit mixing the radio-frequency signal selected by said radio-frequency amplification output filter circuit and the local oscillation signal from said oscillator circuit to output an intermediate-frequency signal.

2. The digital signal receiving tuner according to claim 1, wherein said radio-frequency amplification input filter circuit and said radio-frequency amplification output filter circuit include a bandpass filter.

3. The digital signal receiving tuner according to claim 1, wherein said radio-frequency amplification input filter circuit includes a bandpass filter and said radio-frequency amplification output filter circuit

includes a low-pass filter.

4. The digital signal receiving tuner according to claim 1, wherein said oscillator circuit includes  
a voltage-controlled oscillator provided correspondingly to each frequency band for outputting a corresponding local oscillation signal, and  
5 a phase-locked loop circuit constituting a phase-locked loop together with each voltage-controlled oscillator.

5. The digital signal receiving tuner according to claim 4, wherein said phase-locked loop circuit includes a loop filter formed of a strontium ceramic capacitor.